

03050208-100

(Coosaw River/St. Helena Sound)

General Description

Watershed 03050208-100 extends through Beaufort and Colleton Counties and consists primarily of the *Coosaw River* and *St. Helena Sound* and their tributaries, which include the *Bull River*, the *Morgan River* and the *Harbor River*. The watershed occupies 170,724 acres of the Coastal Zone region of South Carolina. The predominant soil types consist of an association of the Bohicket-Capers-Lynnhaven-Lakeland series. The erodibility of the soil (K) averages 0.08, and the slope of the terrain averages 2%, with a range of 0-6%. Land use/land cover in the watershed includes: 49.8% water, 20.3% forested land, 14.6% nonforested wetland, 5.7% agricultural land, 4.0% forested wetland, 2.9% urban land, and 2.7% barren land.

Whale Branch (Campbell Creek, Halfmoon Creek), McCalleys Creek, and Brickyard Creek join together to form the Coosaw River. Downstream from the confluence, the Coosaw River accepts drainage from Broomfield Creek, Lucy Point Creek (Rock Spring Creek), Parrot Creek (Bass Creek, Duck Pond Creek), the Bull River, the Combahee River Watershed, and Morgan Back Creeks before flowing into St. Helena Sound. The Bull River is formed by the confluence of Wimbee Creek (South Wimbee Creek, Barnwell Creek, Briars Creek, True Blue Creek, Branford Creek) and Williman Creek. Schooner Channel connects Wimbee Creek and Williman Creek. All of these streams are classified SFH.

Brickyard Creek and Broomfield Creek connect the Coosaw River to the Beaufort River (03050208-090), and Lucy Point Creek and Parrot Creek connect the Coosaw River to the Morgan River. Jenkins Creek (Doe Point Creek) and Lucy Point Creek form the Morgan River, which accepts drainage from Boatswain Pond Creek, Parrot Creek, Eddings Point Creek, Village Creek (Pine Island Creek), and Coffin Creek before flowing into St. Helena Sound. All of these streams are classified SFH.

The Harbor River (Club Bridge Creek, Johnson Creek, Ward Creek) connects Trenchards Inlet (Turtle Creek, Moon Creek, Station Creek, Scott Creek, Skull Creek, Skull Inlet, Story River) and Fripp Inlet (Old House Creek) to St. Helena Sound. The Story River connects Trenchards Inlet to Fripp Inlet. There are a total of 228.9 acres of lake waters and 44,747.3 estuarine acres in this watershed. The Harbor River, Johnson Creek, and Fripps Inlet are classified ORW and the remaining streams are classified SFH.

Surface Water Quality

<u>Station #</u>	<u>Type</u>	<u>Class</u>	<u>Description</u>
MD-194	S	SFH	WHALE BRANCH AT JUNCTION WITH CAMPBELL CREEK, ¾ MI W OF MD-010
MD-168	P	SFH	COOSAW RIVER AT CONFLUENCE OF COMBAHEE RIVER, NEAR BUOY 186

Whale Branch (MD-194) – Aquatic life uses are not supported due to dissolved oxygen excursions. There is a significant decreasing trend in pH. In sediment, butyl benzyl phthalate was detected in the 1996 sample. P,P' DDE was detected in the 1998 sediment sample in excess of the ERL value, but less than the ERM value. Recreational uses are fully supported.

Coosaw River (MD-168) – Aquatic life uses are fully supported. Significant decreasing trends in five-day biochemical oxygen demand and total nitrogen concentration suggest improving conditions for these parameters. Recreational uses are fully supported, and a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter.

Shellfish Monitoring Stations

<u>Station #</u>	<u>Description</u>
14-02	CAMPBELL CREEK AT WHALE BRANCH
14-04	BULL RIVER INLET AND COOSAW RIVER
14-08	ASHEPOO RIVER AT ST. HELENA SOUND – BLACK CAN BUOY
14-09	ST. HELENA SOUND AT MORGAN BACK CREEK
14-10	PARROT CREEK AND COOSAW RIVER, MARKER #1
14-11	SAM’S POINT AND COOSAW RIVER
14-12A	CONFLUENCE OF COOSAW RIVER AND WHALE BRANCH
14-13	HALFMOON CREEK AT WHALE BRANCH
14-16A	2000 FT SOUTHEAST OF MOUTH OF FISH CREEK
15-01	BRICKYARD CREEK AT RANGE MARKER
15-01A	MCCALLEYS CREEK AT PAWKIE ISLAND
16A-08	MORGAN RIVER AT VILLAGE CREEK
16A-09	EDDING CREEK AT MORGAN RIVER
16A-10	PARROT CREEK AT MORGAN RIVER
16A-11	JENKINS CREEK AT MORGAN RIVER
16A-13	LUCY POINT CREEK AT MORGAN RIVER
16A-13A	S. EDGE OF LUCY POINT CREEK CSZ AT POLLUTION LINE
16A-13B	N. EDGE OF LUCY POINT CREEK CSZ AT POLLUTION LINE
16A-14	DOE CREEK BEHIND COASTAL SEAFOOD AND DATAW ISLAND
16A-18	EDDING CREEK AT SHRIMP DOCK
16A-19	UPPER REACHES ROCK SPRINGS CREEK
16A-23	EDDINGS CREEK AT TRIBUTARY BETWEEN STATIONS 9 AND 18
16A-24	JENKINS CREEK AT TURN BETWEEN STATIONS 11 AND 14
16A-25	JENKINS CREEK AT TRIBUTARY NORTH OF WARSAW ISLAND
16A-27	MOUTH OF COFFIN CREEK AT MORGAN RIVER
16A-28	HEADWATERS OF COFFIN CREEK AT SHRIMP DOCKS
16A-30	500FT NORTH OF STORMWATER OUTFLOW AT DATAW ISLAND GOLF COURSE
16A-32	VILLAGE CREEK AT FRIPP POINT COMMUNITY DOCK
16B-02	TRENCHARDS INLET AT MOUTH OF STATION CREEK
16B-03	CLUB BRIDGE CREEK AT HARBOR RIVER SOUND
16B-04	STORY RIVER AT FRIPP ISLAND
16B-05	OLD HOUSE CREEK AT FRIPP ISLAND
16B-06	HARBOR RIVER AT MARKER #A13
16B-06F	UNNAMED CREEK IN FRIPP CANAL AT OLD HOUSE CREEK
16B-17	STATION CREEK SSG AT BEAUFORT COUNTY LANDING
<u>Station #</u>	<u>Description</u>
16B-20	TWO MILES NORTH OF CONFLUENCE OF STORY RIVER AND TRENCHARDS INLET
16B-21	UNNAMED CREEK BETWEEN HARBOR RIVER AND STORY RIVER
16B-22	SKULL CREEK AT CONFLUENCE WITH CREEK TOWARD PRICHARDS INLET
16B-26	OLD HOUSE CREEK AT 2 TRIBUTARIES NW OF FRIPP ISLAND MARINA
16B-29	MIDWAY STATIONS 3 AND 6 AT CREEK BETWEEN STORY RIVER AND HARBOR RIVER
16B-31	JOHNSON CREEK AT SC HWY 21 BRIDGE
16B-33	SKULL CREEK AT CONFLUENCE WITH TRENCHARDS INLET

16B-34	TRENCHARDS EST. INLET AT CONFLUENCE WITH LARGE TRIBUTARY ON NW SIDE OF SKULL CREEK
16B-35	Skull Creek at confluence with first major creek on right heading inland from Skull Inlet

Groundwater Quality

<u>Well #</u>	<u>Class</u>	<u>Aquifer</u>	<u>Location</u>
AMB-090	GB	TERTIARY LIMESTONE	FROGMORE

All water samples collected from ambient monitoring well **AMB-090** met standards for Class GB groundwater.

NPDES Program

Active NPDES Facilities

<i>RECEIVING STREAM FACILITY NAME PERMITTED FLOW @ PIPE (MGD)</i>	<i>NPDES# TYPE COMMENT</i>
HALFMOON CREEK JAMES J. DAVIS ELEM. SCHOOL PIPE #: 001 FLOW: 0.008	SC0027481 MINOR DOMESTIC
CAMPBELL CREEK TO WHALE BRANCH NUFARM SPECIALTY PRODUCTS, INC. PIPE #: 001 FLOW: 0.353	SC0000914 MAJOR INDUSTRIAL
MCCALLEYS CREEK SPRINGS INDUSTRIES/WAMCHEM NPL SITE PIPE #: 001 FLOW: M/R	SC0046701 MINOR INDUSTRIAL
AT WWTP PRIOR TO DISPOSAL BJW&SA/ST. HELENA WWTP PIPE #: 001 FLOW: M/R	SC0039811 MINOR DOMESTIC
COTTON DYKE GOLF COURSE BJW&SA/ST. HELENA WWTP PIPE #: 003 FLOW: 0.48	SC0039811 MINOR DOMESTIC
MORGAN RIVER GOLF COURSE BJW&SA/ST. HELENA WWTP PIPE #: 004 FLOW: 0.4	SC0039811 MINOR DOMESTIC
HENRY'S SOD FARM BJW&SA/ST. HELENA WWTP PIPE #: 005 FLOW: 0.2475	SC0039811 MINOR DOMESTIC

Nonpoint Source Management Program

Land Disposal Activities

Land Application Sites

<i>LAND APPLICATION SYSTEM FACILITY NAME</i>	<i>ND# TYPE</i>
SPRAYFIELD FRIPP ISLAND PSD	ND0065919 DOMESTIC

PONDS
KALAMA SPECIALTY CHEMICALS, INC.

ND0076287
INDUSTRIAL

Mining Activities

MINING COMPANY
MINE NAME

PERMIT #
MINERAL

BRICKYARD HOLDINGS, INC.
MARWIN MINE

1138-13
SAND

Growth Potential

There is a low potential for growth in this watershed, with the exception of the area surrounding the City of Beaufort. The City of Beaufort and the Towns of Lady's Island, Burton, and Shell Point are projected to continue experiencing residential and commercial growth. Less than 25% of the total land area of Lady's Island, Burton or Shell Point is suitable for septic system installations; and another 25% or less is classified as marginally suitable. The majority of the watershed includes a collection of sea islands and Hunting Island State Park.